



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,823	04/24/2006	Patrick Fontaine	PF030163	9065
24498	7590	06/05/2009	EXAMINER	
Thomson Licensing LLC P.O. Box 5312 Two Independence Way PRINCETON, NJ 08543-5312			AKINYEMI, AJIBOLA A	
ART UNIT	PAPER NUMBER			
		2618		
MAIL DATE	DELIVERY MODE			
06/05/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,823	<b>Applicant(s)</b> FONTAINE ET AL.
	<b>Examiner</b> AJIBOLA AKINYEMI	<b>Art Unit</b> 2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 March 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7, 9-14, 16- 17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7, 9-14, 16- 17 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 24 April 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-2, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell (Pub. No.: US 2002/0122393A1) and further in view of Herscovich (Pub. No.: US 2007/0087788A1).

With respect to claim 1 and 9:

Caldwell disclosed a method/means of operating a transmitting/receiving station of a wireless communication network in antenna diversity mode, this station having a plurality of reception antennas (fig.1, parag.0018) wherein it consists listening to the communications between two other transmitting/receiving stations of the network (parag.0029), successively on each reception antenna by picking up frame transmitted

by one of the transmitting/receiving station (parag. 0033, 0036, 0038 and 0045) so as to identify a reception antenna from among the plurality of reception antennas which sets up the best communication link with one of the said other two transmitting/receiving stations (parag.0029, 0045). Caldwell did not disclose analyzing the quality of listening on each reception antenna. Herscovich disclosed analyzing the quality of listening on each reception antenna (parag.0043). It would have been obvious to one of ordinary skill in the art at the time the invention was made to analyze the quality of listen on each reception antenna in order to know the best antenna that provide better quality signal.

With respect to claim 2 and 10:

Caldwell further disclosed a method wherein one of the two other transmitting/receiving stations of the network is an access point of the network (parag.0003).

4. Claims 3-6, 8, 11-14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell (Pub. No.: US 2002/0122393A1) and further in view of Herscovich (Pub. No.: US 2007/0087788A1) and Admitted prior art henceforth "Admission".

With respect to claim 3 and 11:

The rejection of claim 1 is incorporated; Caldwell and Herscovich did not explicitly disclose identification of reception antenna validated by picking up an acknowledgement frame transmitted by one of the transmitting/receiving station. Admission identification of reception antenna validated by picking up an acknowledgement frame transmitted by

Art Unit: 2618

one of the transmitting/receiving station (parag.0009 and 0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the above limitation in order to avoid interference.

With respect to claim 4 and 12:

Admission teaches method wherein the analysis of the quality of listening is based on a measurement of the power of the signal in terms of reception of a DATA frames transmitted by one of the transmitting/receiving stations, and on the recording of the result of this measurement in a table in correspondence with the identifier of the tested reception antenna (parag. 0017).

With respect to claim 5 and 13:

Caldwell further discloses a method wherein the analysis of the quality of listening is based on a measurement of the synchronization data contained in the preamble of a DATA frame and on the comparison of the synchronization data with prerecorded data to get an error message that characterizes the reception performance of the tested antenna. (parag. 0036-0037, 0045).

With respect to claim 6 and 14:

Caldwell disclosed a method herein the analysis of the quality of listening is based on a combination of a measurement of the power of the signal in terms of reception of frames originating from the said other stations and of a comparison of preamble with predetermined data for a first tested antenna and on a measurement of the power of the

signal in terms of reception of frames originating from the said other stations for second antennas to be tested (parag. 0045).

With respect to claim 8 and 16:

Caldwell disclosed a method wherein said comparison is a correlation measurement (parag. 0048).

With respect to claim 17:

Caldwell disclosed a wireless communication network wherein the network comprises one or more stations (parag. 0008).

***Response to Arguments***

5. Applicant's arguments with respect to claims 3, 4, 11 and 12 have been considered but are moot in view of the new ground(s) of rejection. Regarding claims 1 and 9, applicant argued that None of the cited references disclose picking up frame transmitted by one of the transmitting/receiving station. Examiner respectfully disagrees with this statement because Caldwell discloses in parag. (0033, 0036, 0038 and 0045) how mobile terminal (MT) listening to the frame control channel FCH can determine which slots in the downlink phase DL are allocated to it and which are for other MTs.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJIBOLA AKINYEMI whose telephone number is (571)270-1846. The examiner can normally be reached on monday- friday (8.30-5pm) Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, YUWEN PAN can be reached on (571) 272-7855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AA  
/Yuwen Pan/  
Primary Examiner, Art Unit 2618